

FOCUS on Our Lake

Reconnecting Citizens
to the Public Use of
Onondaga Lake Waters



Prepared by
FOCUS Greater Syracuse, Inc.

July 2018

FOCUS
GREATER SYRACUSE

“... our beautiful lake, on all its beautiful shores and borders, will present a view of one continuous villa, ornamental with its shady groves and hanging gardens and connected by a wide and splendid avenue that should encircle its entire waters, and furnish a delightful drive to the gay and prosperous citizens of the town, who will, towards the close of each summer’s day, throng it for pleasure, relaxation, or the improvement of health ...”

— Harvey Baldwin, first mayor of Syracuse, 1847

OUR LAKE



FOCUS ON OUR LAKE:
RECONNECTING CITIZENS
WITH THE PUBLIC USE OF
ONONDAGA LAKE WATERS

JULY 2018

Prepared by:
FOCUS Greater Syracuse, Inc.
City Hall Commons
201 E. Washington Street; Suite 704
Syracuse, New York 13202
www.focussyracuse.org
focus@syrgov.net

FOCUS

GREATER SYRACUSE

ABOUT FOCUS GREATER SYRACUSE

FOCUS

GREATER SYRACUSE

Mission Statement

FOCUS (Forging Our Community's United Strength) **Greater Syracuse, Inc.** is a citizen-driven organization that taps citizen creativity to impact change in Central New York by enabling citizens, organizations and government to work together to enhance the quality of our lives and our economic future.

What is FOCUS?

FOCUS Greater Syracuse engages in research, public policy advocacy, public education and outreach to promote intelligent, inclusive, sustainable decision making. It is a unique organization that values and solicits citizen's input in decision making. It is positive, inclusive and non-judgmental.

To foster change within Onondaga County and the City of Syracuse, FOCUS brings individuals and groups together to collaborate on common agendas and common goals. FOCUS regularly informs the community regarding the advances made on the citizens' goals and instills community pride that serves to unite us and strengthen us as a community.

FOCUS works with citizens to identify and explore current community projects, measuring progress and preparing reports for the community, including Strategic Plans (Arts & Culture; Water and Waterways; Sustainability; CNY Pathways; Smart Growth); Patterns of Government; Civil Discourse Forums and CDC National Report on Pandemic Flu; and Onondaga Lake.

FOCUS hosts all-inclusive community events to showcase civic trustees, regional assets, new ideas and opportunities and communicates its findings in several ways. One is its monthly FOCUS Forum sessions focused on three themes: economic vitality, social equity/social justice and environmental stewardship. It also distributes plans to elected officials, nonprofits, government agencies, citizens, schools and colleges.

INDEX



Index	5
Letter from FOCUS	6
Executive Summary	7
Introduction	8
Notable changes since the 2012 lake report	10
The Survey: What Central New York thinks about the lake	14
Community Conversations	25
The Opportunities: What's ahead	26
The Challenges: What people need to know about the lake	29
Educational pieces recommended	33
Governance/Stewardship/Information models	36
Words of Wisdom: Next Steps	38
Appendices	40

LETTER OF THANKS

As the Executive Director of FOCUS Greater Syracuse I would like to thank Onondaga County for providing us the opportunity to continue our community outreach efforts in regard to the future uses of Onondaga Lake. Since 2012 we have worked alongside county leaders in the effort to make sure the opinions, input and constructive advice of County residents was heard, acknowledged and captured in a report format that is useful for county policy-makers now and in the years to come.

This report could not have been completed without the professional and personal support of the following individuals and groups:

Kimberly Armani, RN, MS, PhD, and Efstathios Kefallonitis, MS, PhD, from the marketing faculty of the State University of New York at Oswego, and analytics expert Emory Creel, MA, MS, who provided professional guidance on the crafting of the online survey questions to assure effective qualitative evaluation, and then analyzed the results to determine which results conveyed information with statistical significance.

The more than 20 members of the Onondaga Lake Water Resources Advisory Group who represented a wide variety of stakeholder groups and met four times to advise us on the crafting of the survey, the multi-dimensional outreach effort, and finally on the methods for evaluating the results. The advisory group represented boaters of all kinds, state and local government officials, environmental advocates, community planners and the Onondaga Nation to name a few.

And thanks go out to the 1,083 Central New York residents who completed the survey, the little girl who wants to see a sea monster on the lake, the rowing crews who look forward to more competitions, and to the hundreds of people of all ages who contributed art and ideas as they participated in our Snapshot Survey during the Onondaga Cup and Lake Fest in July 2016 and in 2017, and tested the survey at the Honeywell Sportsmen's Days at Carpenter's Brook Fish Hatchery. Their creativity helped broaden the activities covered in the survey, and their concern about the future of the lake was clear.

We hope this report will help lead our community on a continued path of dialog and planning for the future of Onondaga Lake. The lake is a wonderful natural resource that has provided our community with recreational and environmental benefits that are open and available to all our residents. The views and opinions of local people in this report will do nothing to change that history but help to improve the lake as a community asset in the future.

Thank you,

Jim Keib
Executive Director
FOCUS Greater Syracuse

Frank Moses
Community Engagement Director
FOCUS Greater Syracuse

Dee Klees
Communications Director
FOCUS Greater Syracuse

*Ms Armani is the Director of the SUNY Oswego Syracuse branch campus located in downtown Syracuse, and founding director of the SUNY Oswego Active Aging and Community Engagement (AACE) Center, a multidisciplinary modular learning and research infrastructure located at the Metro Center.

EXECUTIVE SUMMARY

This report is a fresh look at Onondaga Lake, its waters and our community's regard for it. The study puts special emphasis on the lake itself rather than the shoreline, which was covered extensively in our 2012 report "FOCUS on Onondaga Lake: A roadmap to facilitate reconnecting the lake with the community."

This five-year update arrives at an auspicious time as Onondaga Lake becomes a center of new activity. Many new opportunities have opened up making the lake – and its environmental legacy – a community asset and one that has been long overlooked. The revival of rowing competitions on the lake, added boat launches, and the World Canal Conference in September of 2017 are just a few of the most obvious signs of new activity on the lake. Many of the findings and recommendations of the 2012 report either have been implemented or are in process. Some have not, and those are worth noting in the recommendations of this report.

This effort sponsored by Onondaga County and Honeywell began with a review of previous reports and gathering of ideas from visitors to the 2016 Onondaga Cup and Lake Fest with a Snapshot Survey. That was followed by the convening of a Resource Work Group of stakeholders who regularly work on lake issues and advised the research team over several months of survey development. The survey was then pilot tested over several weeks with dozens of community members, including English-language learners and visitors to the 2016 Sportsmen's Days at Onondaga County's Carpenter's Brook Fish Hatchery. The survey was launched Oct. 21, 2016, at a FOCUS Forum about Onondaga Lake and Onondaga County's Connect the Drops program.

FOCUS gathered survey responses over four months from more than 1,000 individuals interested enough in the waters of our lake to fill out an in-depth questionnaire. It found that – perhaps not surprisingly – most respondents participate in water activities, many of them live close to the lake and are relatively affluent, and many of them choose other lakes for their water activities. While swimming was the water activity cited most often for any water body, wildlife viewing was the activity cited most often for Onondaga Lake.

They know the lake well. More than half the respondents said they had been going to the lake for more than 25 years, and more than a third of them go to Onondaga Lake even in the winter. Water quality is the factor respondents cited as most important in their experience of the lake. Asked what would keep them from doing what they would like to do on the lake they cited water quality, beach quality – presumably because there is no beach now – and crowding.

The broad public interest survey was supplemented by more than 50 interviews with individuals representing different walks of life and those with particular expertise about the lake, its history and its governance. The comment most often made by those with a wide range of interests and concerns was that they are amazed that the lake water quality has improved as much as it has since cleanup efforts began and that it's important to maintain that quality and improve it as much as possible.

With increased activity on the lake there are opportunities and challenges ahead, so first among the recommendations at the end of this report is to maintain the lake's water quality and continue to improve it. Then the report identifies four other steps that will emphasize the lake's assets for the people of this community and visitors.

INTRODUCTION

Why this report, Why now, Why FOCUS?

A lot has changed in the five years since release of the 2012 report “FOCUS on Onondaga Lake: A roadmap to facilitate reconnecting the lake with the community,” still it remains clear that the state of the lake is a common interest for people of the region.



This is a crucial time for the lake as cleanup efforts have made significant improvement in the water quality and there is renewed interest in recreational use and development of the lake. Onondaga County has implemented about 200 green and gray infrastructure projects to improve water quality. Honeywell has completed dredging and capping of the lake bottom. The lake trustees released a draft of the Natural Resources Damage Assessment Restoration Plan on April 24, 2017, as a step in negotiating projects to help make amends for a century of pollution.

This is the third report on the lake completed by FOCUS Greater Syracuse, a not-for-profit citizen-driven citizen-engagement organization with a nearly 20 year track record of research, policy studies and public education and outreach. These repeated examinations reflect the integral role the lake plays in Central New York and its impact on the community’s perception of itself and the quality of life here. This report and the survey conducted for it fulfill one of the recommendations of the 2012 report – to have a baseline survey of data about how the lake is used as of 2016-17.

As in 2012 this report summarizes the thoughts of expert authorities and more than 1,000 respondents who answered a survey about the lake from Oct. 21, 2016, through Jan. 31, 2017. Much of the information gathered for the 2012 report was about the shoreline and land-based activity around the lake. The current report puts the emphasis on the water of the lake, its condition, how it is used as of 2016-17 and the desired uses and role it will have in the future for the people of Central New York.



Over the centuries the lake was first a gathering place and fishing and hunting ground for the Haudenosaunee. It took on spiritual significance as the site where Hiawatha issued the Great Law of Peace as early as 1142 and united their then-five nations.

As a waterway the lake provided easy access to the first Europeans to visit the region in the 1600s. With settlement in the 1790s the lake became the source of the first industry – salt production. That was followed by willow basketry, amusement parks and harvesting of whitefish. Inclusion of the lake as part of the Erie Canal system as expanded in 1836 cemented its role as a commercial waterway transporting goods such as fragile Onondaga Pottery and Syracuse China.

Eventually production of soda ash and other products, including municipal waste, from the late-1800s to 1960s so contaminated the lake that recreational use drastically declined. By the 1970s it was considered an embarrassment to the community rather than an asset. Today, rather than being ringed by cottages as are other lakes in the region, Onondaga Lake is almost entirely surrounded by land once owned by industry that has been acquired by Onondaga County and is now in public ownership. That may prove to be the great blessing for its future.

The Clean Water Act of 1972 and Comprehensive Environmental Response, Compensation, and Liability Act (better known as the Superfund) in 1980 launched the most recent chapters in the lake's history. The demise of industry on the lakeshore, testing and evaluation of water quality and lawsuits over contamination spurred government and business into cleanup efforts. Scientists and engineers have studied the lake, and Honeywell Corp. launched the most extensive part of the cleanup process with dredging and shoreline restoration. Onondaga County has made significant strides in improving water quality through innovative treatment programs. The county's Save the Rain program has met requirements to reduce combined sewer overflows by 95 percent, well ahead of its 2018 deadline. Where the lake goes from here is the focus of this report.

NOTABLE CHANGES SINCE 2012 LAKE REPORT

Since the FOCUS on Onondaga Lake report of 2012 progress has been made in many areas of concern. There also have been changes in the status of the lake and changes in governance groups and their priorities and commitments to the lake cleanup.

Lake-to-be-public resolution

In April of 2016 the Onondaga County Legislature approved a resolution calling for all county-owned shoreline to remain in the public domain and asking all other shoreline owners to permit public access. This was first among the steps recommended in the 2012 report.

County IDA purchased the Roth Steel site

In 2015, the Onondaga County Industrial Development Agency (OCIDA), bought the former Roth Steel site near the southwest shore of Onondaga Lake from Canadian Herbert Black who had planned to continue operating it as a scrapyard. OCIDA support has begun the process of cleaning the site as required by the state Department of Environmental Conservation.

Natural Resource Damage Assessment

On April 24, 2017, the New York Department of Environmental Conservation and U.S. Fish and Wildlife Service released a draft Natural Resource Damage Assessment Restoration Plan for public comment through June 2 as part of the negotiation process with Honeywell. On Sept. 19, 2017, they announced the release of the final plan. The plan includes establishing wetlands; accessible fishing, boating, and trail areas; and land transfers in the watershed. (1)



Wetland restoration and tributary cleanups

The Onondaga Environmental Institute, the Isaak Walton League of Central New York, Onondaga Lake Conservation Corps, Audubon and other conservation groups working with assistance from Honeywell

already have launched projects to restore plants and trees and wetlands around the lake with new emphasis on the tributaries to the lake. Restoring natural areas around the lake was also among the recommendations of the 2012 report.

Skä-noñh Great Law of Peace Center

In November of 2015 the Onondaga Nation and the Onondaga Historical Association opened a center devoted to the history and the culture of the Haudenosaunee at the site of a former living history museum off Onondaga Parkway. Skä-noñh – The Great Law of Peace Center – is across a busy highway from the shores of Onondaga Lake, but it is one step closer to the stated goal of having a cultural center for the Onondaga Nation on the shores of the lake.

End of dredging

In 2014 Honeywell announced that it would stop dredging contaminated material from the bottom of the lake. The company completed the capping portion of the lake cleanup plan in 2016. Since then the company working with conservation groups and volunteers has planted more than 1 million native plants as part of its lake wetlands restoration efforts.

Onondaga Lake Watershed Partnership

The Onondaga Lake Watershed Partnership was established to serve as a neutral, information clearinghouse for lake and watershed dialogue and decisions and took over some of the work of the Onondaga Lake Partnership. However since Jan. 1, 2017, the OLWP has been without its staff of one as the coordinator has been reassigned to serve a Finger Lakes Hub for the New York State Department of Environmental Conservation instead of Onondaga Lake.

Onondaga Cup and Lake Fest

In July of 2016, Syracuse Media Group – now Advance Media New York; the Chargers Rowing Club and Honeywell sponsored a daylong festival at the Willow Bay section of Onondaga Lake Park that included rowing crew and canoe competitions in addition to activities on the shoreline. That initial one-day event drew approximately 12,000 people, including Governor Andrew Cuomo, to the lakeshore that day. The festival returned in 2017 and 2018.



New boathouse

Near Syracuse University boathouse on the outlet to Seneca River another boathouse has been built to be used by rowers affiliated with the Chargers Rowing Club. The Chargers boathouse serves rowing teams from the community including an adaptive rowing program affiliated with the Veterans Affairs Medical Center, an indigenous rowing team, and teams from four high schools: Baldwinsville, Fayetteville-Manlius, Liverpool and Syracuse City School District.

Added boat launches and dockage

Docking facilities have been added to the west shore of the lake near the Lakeview Amphitheater for motor boats and small craft. Small craft traffic on the water has increased. Kayak rentals at Onondaga Lake Park topped 1,000 in 2016, according to vendors at Camillus Kayak.

High water

Spring 2017 also brought extended periods of rain. High water levels on the lake filled parking lots at Onondaga Lake Park and saturated the grounds at Willow Bay. The flooding serves as a reminder that the impact of nature must always be considered in the best of plans. In the first six months 2017 was on track to be the fourth wettest year on record in Onondaga County and there were twice as many combined sewer overflows

Lakeview Amphitheater

The first full season of events was completed in 2016 at the Lakeview Amphitheater on the west shore of the lake. There were 22 events booked at the amphitheater. In addition to the more than 200,000 ticketed patrons at the amphitheater, boaters gathered off shore to catch a bit of the music, and on the other side of the lake to view fireworks that accompanied the July 4th concert. The event schedule there continues to grow.

Fairgrounds plans

The governor's budget proposal announced in January includes up to \$70 million for continued renovations of the State Fairgrounds including improved parking and access to the amphitheater. The project is expected to increase the number of visitors to the west side of the lake.



GREG CRAYBAS PHOTOGRAPHY

Bald Eagles

A relatively mild winter with open water in 2016-17 reduced the numbers of bald eagle sightings on Onondaga Lake. They were still there often enough to make them part of scheduled birding events. At a bird watching talk and walk arranged by Audubon and Honeywell at Destiny USA in early February birdwatchers were able to observe a pair of eagles perched in a tree at the southwest shore. Without ice cover on other lakes, Onondaga Lake's open water warmed by the outlet of Onondaga Creek and the Metropolitan Wastewater Treatment Plant did not draw as many fishing birds as in a severe winter.

Fish counts

SUNY ESF researchers working under auspices of the U.S. Geological Survey are taking stock of the fishery in Onondaga Lake. As of late 2015 they had tagged 60 lake sturgeon – an endangered and protected species in New York. The largest of them was nearly 6 foot long and too heavy to weigh on researchers' scales. The number of species in the lake also continues to grow from 10 or 12 in the 1970s to as many as 66 by 2016. During the 24-hour SUNY ESF Bioblitz in 2014 there were 25 fish species identified. That number found in such a short time is notable as it indicates a significantly diverse population. The increasing number of species, as some of those interviewed reported, includes some invasive species that are not an asset to the lake and are a problem experienced across the state that will have to be taken into account as boat launches are added with washing stations. Fish populations make it clear just how interconnected the lake is with other waters in Central New York. Fisheries experts say the sturgeon in Onondaga Lake probably entered the lake from the Seneca River and the Oneida Lake population, and fish tagged for competitions in Onondaga Lake have been retrieved in Oneida Lake.

Fish advisory signs

State advisories remain in place limiting consumption of fish from the lake due to the risk posed by contamination with mercury and other hazardous substances. Signs warning of the risk of eating the fish were put up at key points around the lake in 2017.

Other wildlife

Residents of the Lakefront District in the city of Syracuse report an increase in the amount of aquatic mammals in the lake's Inner Harbor area including muskrat and even beaver. In 2014 several small trees along Onondaga Creek were felled and appeared to have been gnawed down. Also that year a beaver was photographed on South Warren Street in Syracuse a few blocks from Onondaga Creek. Beaver, the official New York State animal, was nearly extirpated in New York in the 1800s and has since rebounded so that there are permitted winter trapping seasons for them throughout the state except Long Island.

Historic levels of interest

The Onondaga Historical Association's release of the locally-produced film "Beneath the Surface: The Storied History of Onondaga Lake" drew a full house of viewers paying \$20 to \$100 to see the movie at The Palace Theater in Eastwood in January and March of 2017. The number of people turned away at the door for the second sold-out showing demonstrates the strong interest the people of Central New York have in their lake and a number of subsequent showings were scheduled.

World Canals Conference

In September 2017 Syracuse was host to the World Canals Conference in its first return to North American since Rochester, NY, was host in 2010. The conference draws boaters and boating industry representatives from around the world.

THE SURVEY

What Central New York thinks about the lake

Methodology

Data were collected via a 21-question survey. The survey included multiple choice questions, scales and open-ended questions and was distributed online and in person with paper versions.

Respondents were asked about their “water activities,” defined in this survey as activities that require water for participation. The survey was divided into five sections: respondents’ current water activities on any body of water; current water activities on Onondaga Lake; future water activities on Onondaga Lake; experiences with Onondaga Lake; and demographic questions.

Questions included in the survey were developed by reviewing similar surveys from other communities, through an extensive literature review, compilation of uses of lakes and other bodies of water, and with input from the Lake Resource Work Group. In addition, information from 565 citizens about activities they wanted on Onondaga Lake, collected via a qualitative Snapshot Survey conducted at the Onondaga Cup & Lake Fest, held on July 16, 2016, was incorporated into the survey questions. The survey was piloted with the Lake Resource Work Group, FOCUS Greater Syracuse colleagues, and at the Honeywell Sportsmen’s Days at Carpenter Brook from July through September 2016. Minor changes were made, and then the survey was officially launched Oct. 21, 2016, at a Friday FOCUS Forum about Onondaga Lake and Onondaga County’s Connect the Drops program. Surveying was completed on Jan. 31, 2017.

An effort was made to include input from all parts of the community in terms of demographics, preferences and behaviors. Respondents were recruited primarily through the contact lists of FOCUS Greater Syracuse along with other educational, civic, religious, government, professional and non-profit organizations chosen to reflect this diversity. The organizations were asked to distribute the surveys through their networks as broadly as possible.



Results

Demographics

A total of 1083 surveys were collected between October 21, 2016, and January 31, 2017. Most (97%) of the respondents' primary residences were located within a 60 mile radius of Onondaga Lake.

However, people from other states (e.g., Georgia, Florida and Pennsylvania) and from other areas of New York (e.g., Rochester, Farmington and Vestal) also responded to the survey. The **largest concentrations of respondents resided in Liverpool (174), Baldwinsville (64), and Syracuse zip code 13210 (62). The municipality with the largest number of respondents was the City of Syracuse with 289 people** citing their residence as being within nine of the zip codes predominantly within city limits. Note that zip code borders do not align precisely with municipal boundaries) Individuals living outside a 60 mile radius, or approximately an hour's drive, of the lake were excluded from the analysis.

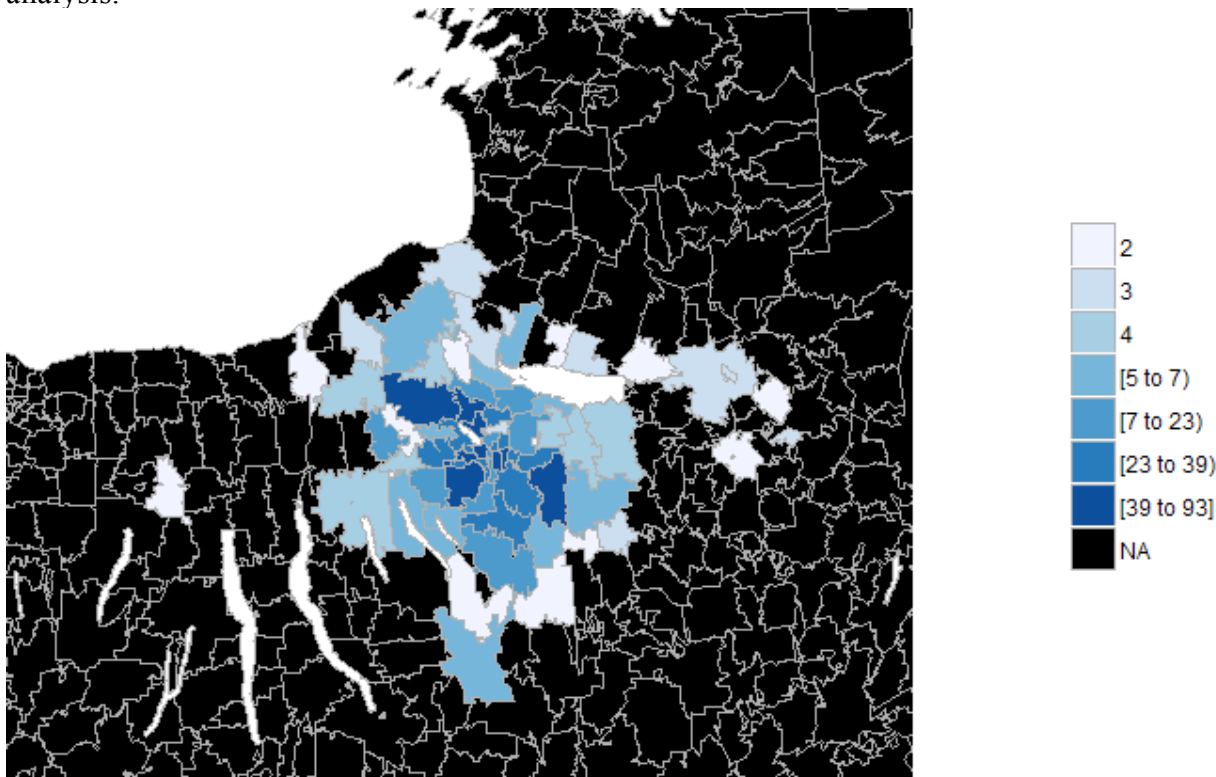
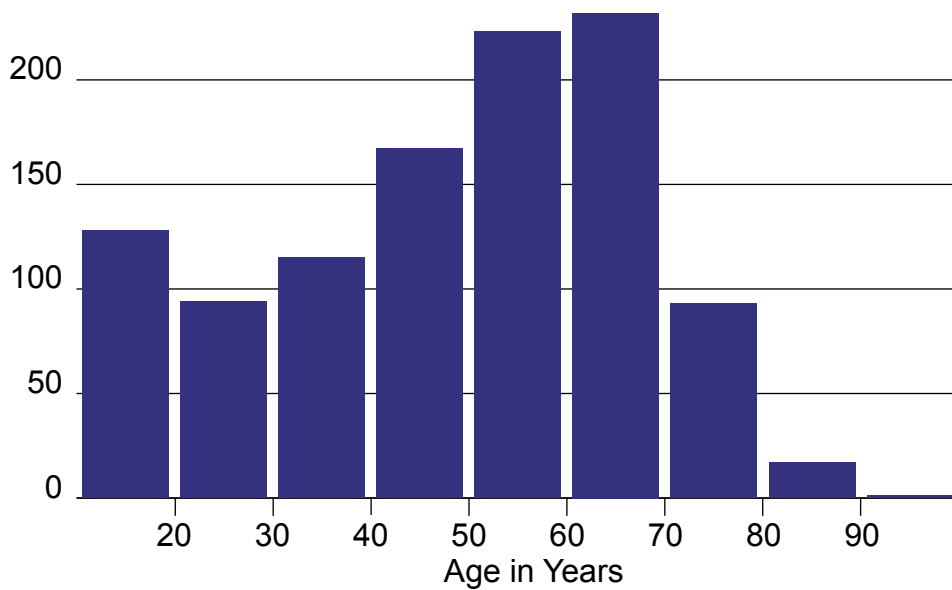


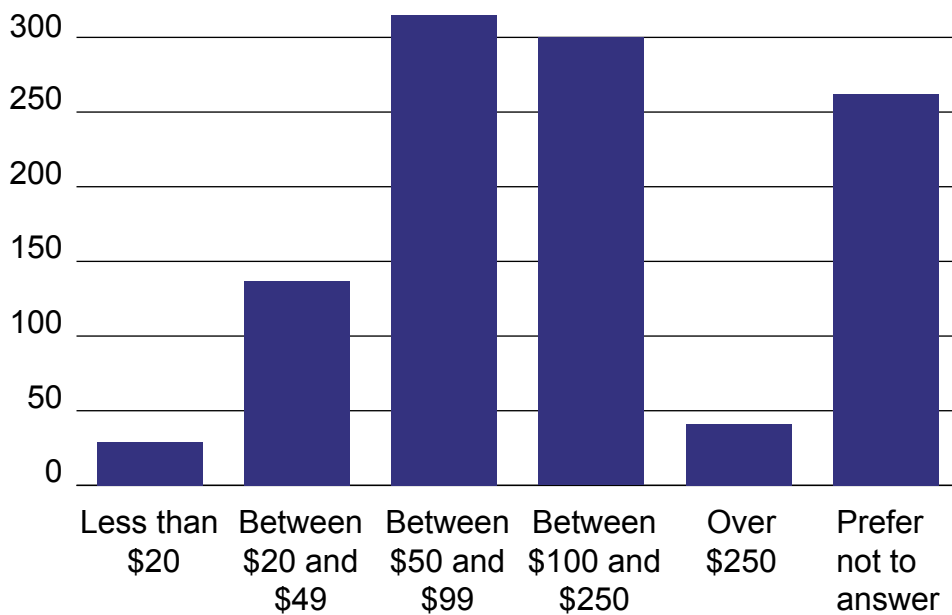
Figure 1: Geographic Distribution of Survey Respondents

The sample was also **predominantly middle-aged (average = 46.82 years), white, and relatively affluent.** The median income for our sample was \$50,000 - \$99,000, compared to a median 2014 household income for Syracuse of \$36,457 and for New York State as a whole of \$59,269 (Source: http://www.civildashboards.com/city/syracuse-ny-16000US3673000/median_household_income). The youngest respondent to the survey was 13. The oldest was 92. (Median age for the City of Syracuse was 29.9 according to the American Community Survey estimate for 2015, and 38.8 for Onondaga County. Comparison to the survey response is not appropriate however because surveys rarely accurately reflect the opinions of those under age 10.) Our Snapshot Survey, however captured some of their enthusiasm and ideas.



Note: Totals vary as some respondents did not answer all questions.

Figure 2: Histogram of Respondent Ages



Note: Totals vary as some respondents did not answer all questions.

Figure 3: Respondent Yearly Income in \$1,000s

Demographics (cont'd)

Gender	Count	Percentage
Female	507	49
Male	479	47
Prefer not to answer	43	4
	1029	100

Note: Totals vary as some respondents did not answer all questions.

Table 1: Gender of Survey Respondents

Likewise, the racial and ethnic make-up of respondents was more like the population of Central New York than of Syracuse or Onondaga County. These findings might reflect the geographic dispersion of our sample.

Race/Ethnicity	Number	Percentage	Syracuse City, 2010 population*	Onondaga County, 2010 population*	Central New York, 2010 population*
American Indian or Alaska Native	12	1%	.9%	.8%	n/a
Asian	15	1%	4.8%	3.1%	2.1%
Black or African American alone	22	2%	12.6%	11%	6.9%
Hispanic or Latino	8	1%	16.3%***	4%***	3.2%
White alone	852	82%	56%	81.1%	85.2%
Multicultural	39	4%	2.9%	2.8%	n/a
Immigrant, refugee or new American	2	0%	n/a	n/a	n/a
Prefer not to answer	79	8%	n/a	n/a	n/a
Other	7	1%	n/a	n/a	n/a
	1036	100%			

Note: Totals vary as some respondents did not answer all questions.

Table 2: Comparison of Sample Race & Ethnicity to City, County and CNY Region

* Source: www.census.gov/en.html

** Source: <https://labor.ny.gov/stats/nys/statewide-population-data.shtm>

*** Hispanics also included in applicable race categories

Information Source Use Related to Respondent Age

When survey respondents were asked how they got news about Onondaga Lake, the **most popular information sources were Onondaga County government web pages (46%), radio (44%), government websites such as NYS DEC and EPA (38%), and weather broadcasts (37%).**

Social media (14%) were more popular sources of information for younger rather than older respondents. (In Figure 4, 50% of responses occurred within the range indicated by each box with the horizontal line indicating the median age for each category.)

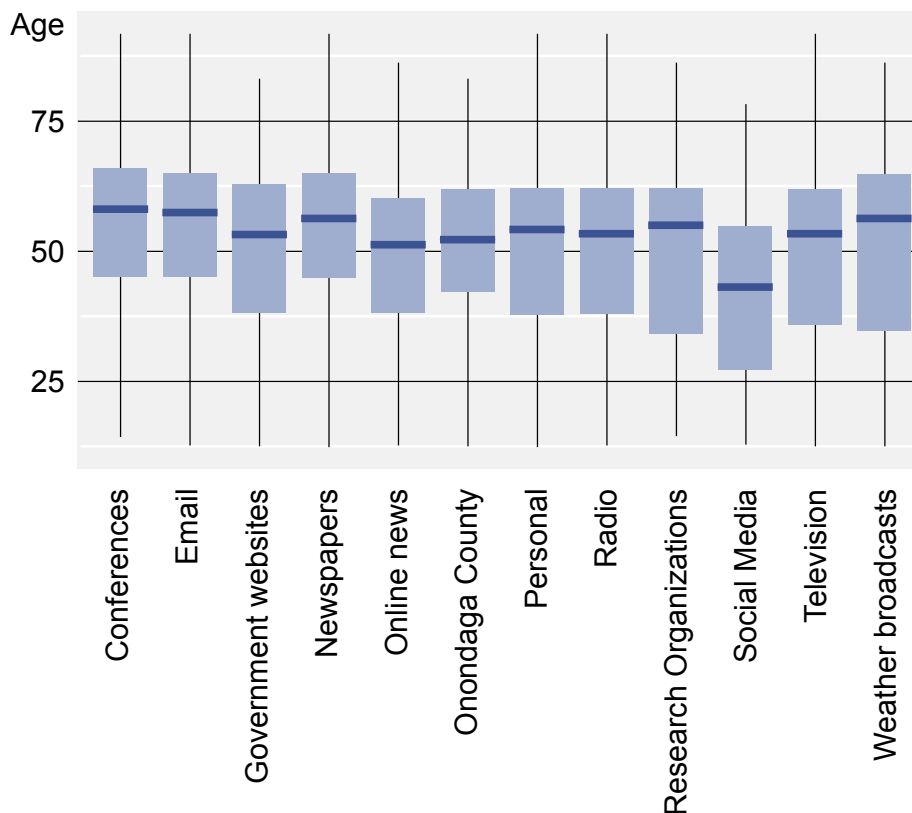
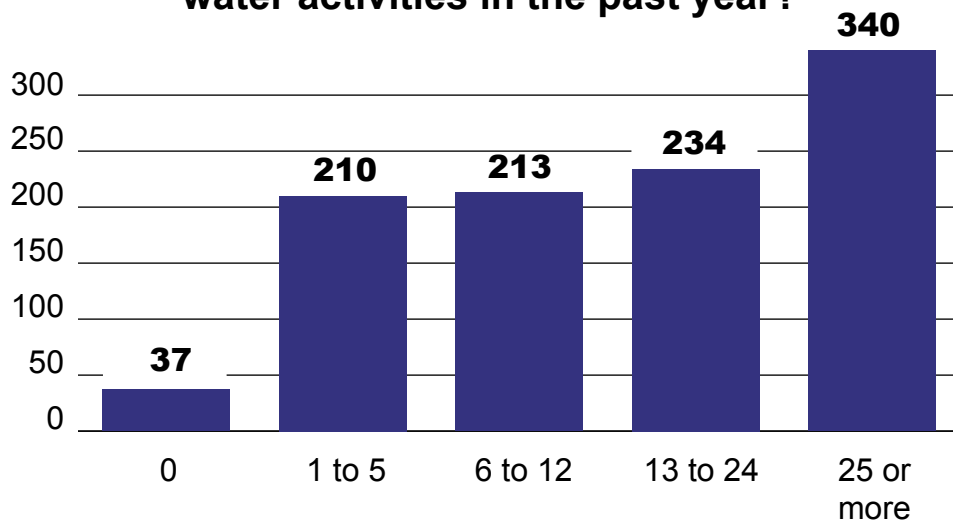


Figure 4: Box plot of Age and Information Source

Frequency and Number of Years of Use of Onondaga Lake

Many of our respondents are avid participants in outdoor water activities, with almost **1/3 reporting that they spent 25 or more days during the past year in or on the water** and only 37 (3.6%) reporting that they never participated in outdoor water activities.

How many days did you spend in outdoor water activities in the past year?



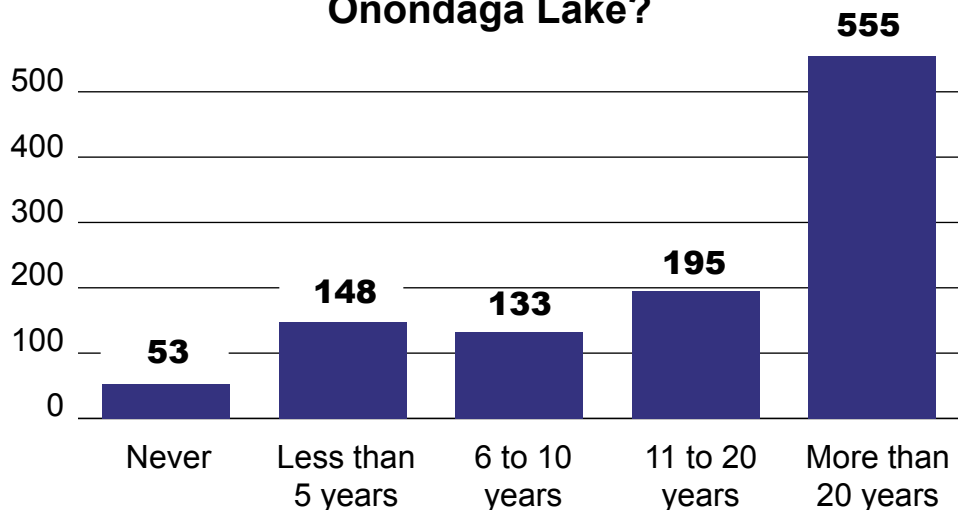
Note: Totals vary as some respondents did not answer all questions.

Figure 5: Days in Outdoor Water Activities

The data also indicate that respondents spend less time in or on Onondaga Lake than other bodies of water. **46.8% (423) reported using the lake between 1 to 3 times per year, and 23.5% (244) of respondents reported weekly or daily use of the lake in-season.**

Only about 5% of our sample said that that they had never gone to Onondaga Lake. Indeed, **most of those surveyed reported that they have been going to Onondaga Lake for an extended period of time, with roughly half (51.6%) saying that they have been going to Onondaga Lake for over 20 years** and an additional fifth going to the lake between 11 to 20 years.

How long have you been going to Onondaga Lake?

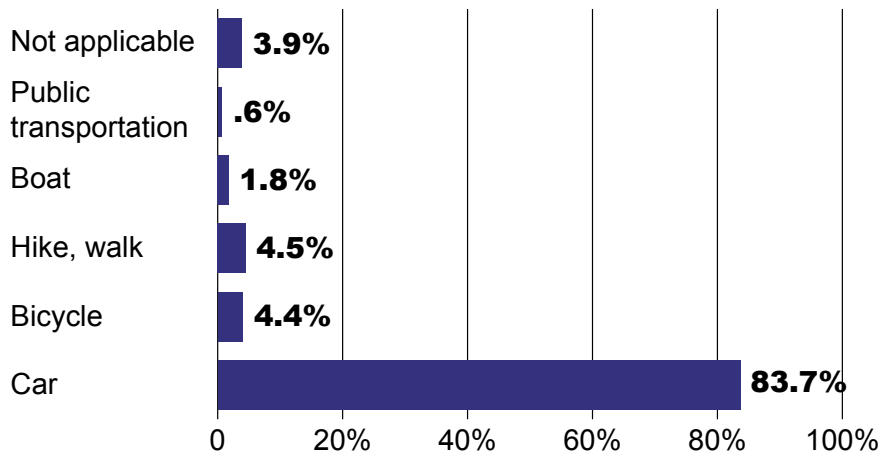


Note: Totals vary as some respondents did not answer all questions.

Figure 6: Length of Time Visiting the Lake n=1036

Only a small number of respondents reported that they are located within 5 minutes from the lake; for about half the respondents, the trip takes 6-15 minutes; 40% travel 16 minutes to half an hour, and 5% travel an hour or more to get to Onondaga Lake. Not surprisingly then, the **majority of respondents travel to Onondaga Lake by car (85%)**. Less popular means of transportation include **bicycling (4%) and walking (5%)**. About **2% of respondents get to Onondaga Lake by boat** and less than **1% use public transportation** to get to the lake.

How do you get to the lake?

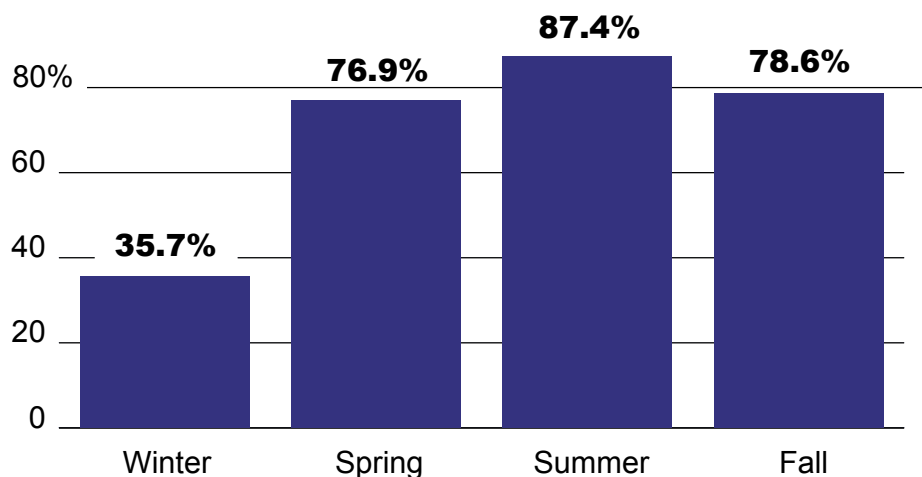


Note: Totals vary as some respondents did not answer all questions.

Figure 7: Transportation to the Lake n=1036

Going to the lake is a year-round activity for those we surveyed. While spring, summer and fall are the most popular seasons to visit the lake, 35.7% of respondents go to Onondaga Lake during the winter. Cross tabulation shows a positive correlation between winter enjoyment and viewing wildlife.

When do you like to go to Onondaga Lake?



Note: Multiple answers allowed.

Figure 8: Seasonal Visits to the Lake n=1036

Activities on Onondaga Lake and Other Bodies of Water

Our respondents indicated that they participate in different types of activities at Onondaga Lake than on or in other bodies of water. For example, **swimming was the most common activity performed in any body of water**, followed by rowing, paddling and kayaking, wading or sunning, viewing waterfowl and birds, and fishing.

What do you usually do in a lake, river, ocean or other body of water?

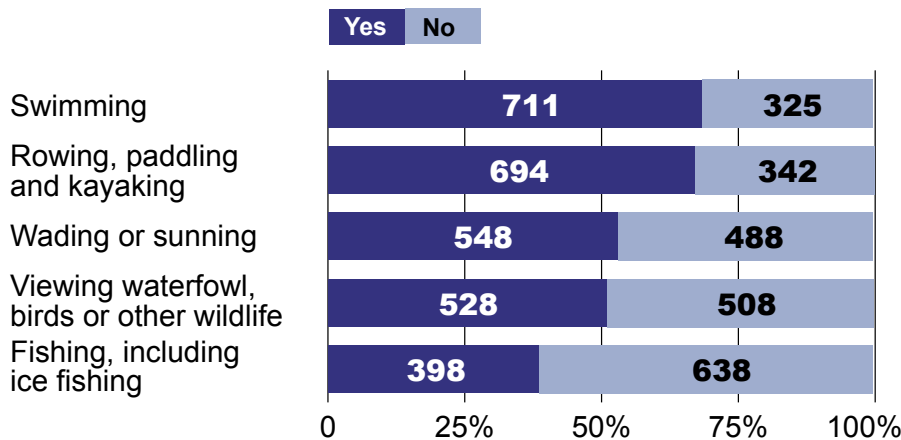


Figure 9: Usual Water Activities, Top 5 Answers

By contrast, the **most common activity at Onondaga Lake was viewing waterfowl and birds**. Other popular water activities at Onondaga Lake included attending a public event, such as a regatta or water festival; rowing, paddling or kayaking; and education or science program. The number of respondents that did “nothing” at the lake in the past year was the fourth most popular response, with almost 20 percent of respondents giving this answer.

What did you do in or on Onondaga Lake in the past year?

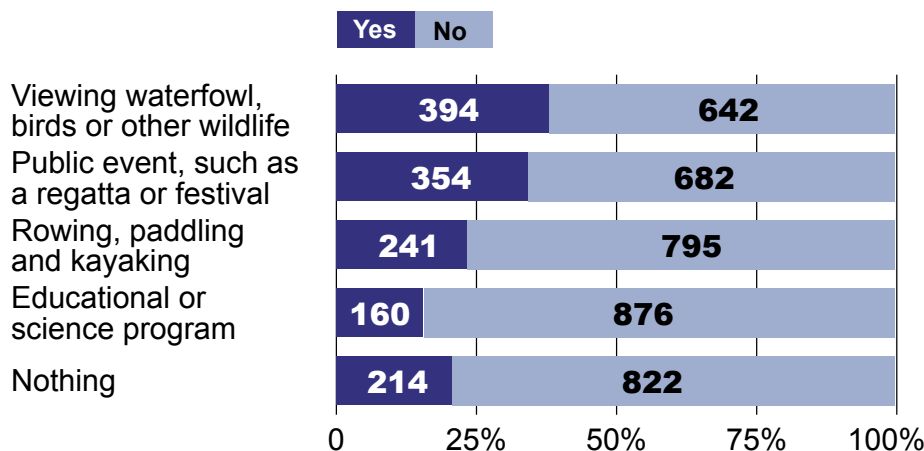


Figure 10: Water Activities on the Lake, Top 5 Answers

Cross tabulation was performed to see if there were associations between participants' usual water activities and activities performed at Onondaga Lake in the past year. Viewing wildlife ($r=.51$) and sailing ($r=.45$) were usual activities done at Onondaga Lake. Similar, but lessor relationships were found for fishing ($r=.33$), hunting ($r=.34$) and motor boating ($r=.34$).

Respondents were also asked about **what they like best about Onondaga Lake**. Multiple responses could be chosen. The **most frequent responses to this question were restoration of wildlife, birds, plants and clean water; clean-up efforts; public accessibility; attracting wildlife, like bald eagles; and natural beauty**.

Cross tabulation was done to see if there are relationships between what respondents like best about Onondaga Lake and what they actually did on Onondaga Lake in the past year. Positive correlations were found between viewing waterfowl, birds or other wildlife and lake attributes such as attracting wildlife, like bald eagles ($r=.34$), restoration of wildlife, birds, plants and clean water ($r=.32$) and natural beauty ($r=.26$).

What do you like best about Onondaga Lake?

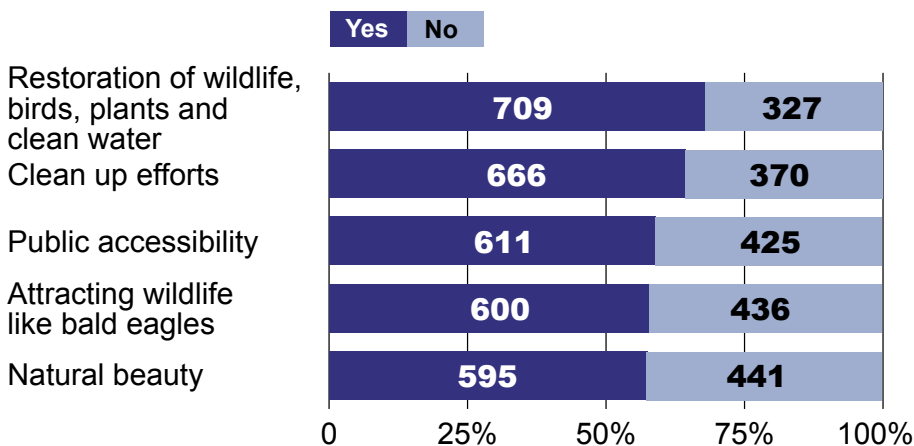


Figure 11: Most Liked Features of Onondaga Lake, Top 5 Answers

Overall Onondaga Lake Water Experience

We then asked respondents about factors that influenced their overall water experiences. The most important factors included, in order of importance: water quality, safe environment, feeling relaxed, enjoying nature and having fun. The least important determinants of respondents' water experiences were well enforced rules, uncrowded environment, socializing with friends, and testing water skills.

How important are each of the following to your overall water experience?

Rank	Variable	Mean	Median
1	Water Quality	1.828	2
2	Safe Environment	1.782	2
3	Feeling relaxed	1.772	2
4	Enjoying nature	1.756	2
5	Having fun	1.732	2

Numerical summary based on 0-Not Important 1-Important 2-Very Important

Table 2: Top 5 Factors Influencing Water Experience

Future Water Activities on Onondaga Lake

A final set of questions focused on respondents' future water activities on Onondaga Lake. We first asked respondents to rate a variety of activities on a 5-point scale according to the desirability or undesirability of each. **The four most desired future activities included: paddling; viewing wildlife; public events and education or science programs.** The **three least desirable future activities included: hunting; water skiing or tubing; and jet-skiing and personal watercraft use.** The average rating for diving and snorkeling was also negative indicating that it was not desirable to respondents; however, because the average and median values were both close to zero, this finding likely reflects that most of those surveyed were neutral or uninterested in the activity rather than opposed to it occurring in Onondaga Lake.

What would you like to do in or on Onondaga Lake in the future?

Desirable Activities				Undesirable Activities			
Rank	Variable	Mean	Median	Rank	Variable	Mean	Median
1	Rowing, kayaking or paddling	.99	1	1	Hunting birds or waterfowl	-.88	-1
2	Viewing waterfowl, birds or other wildlife	.91	1	2	Water skiing or tubing	-.55	-1
3	Attend a public event, such as a regatta or festival	.85	1	3	Jet-skiing or personal watercraft use	-.47	0
4	Education or science program	.67	1	4	Diving or snorkeling	-.24	0

Numerical summary based on -2-Very Undesirable -1-Undesirable 0-Neutral 1-Desirable 2-Very Desirable

Table 3: Desirable and Undesirable Future Activities on Onondaga Lake

Barriers to Onondaga Lake Activities

Lastly, we asked respondents **what would prevent them from doing what they want to do on Onondaga Lake. The number one answer was water quality, chosen by 67% (697) respondents.** Additional, but clearly less important, factors which prevented respondents from enjoying water activities on the lake included: beach quality, crowding, activity not offered and (lack of) access to the water.

Cross tabulation between respondents' usual water activities and factors which prevent doing desired activities showed relationships between wading and sunning and beach quality ($r=.32$) and water quality ($r=.21$). Similar associations were found between swimming and beach ($r=.21$) and water ($r=.18$) quality.

What would prevent you from doing what you want to do in or on Onondaga Lake?

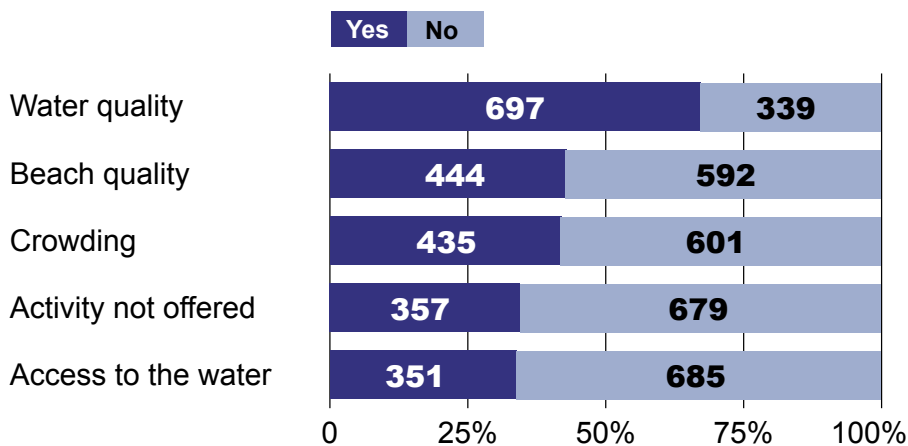


Figure 12: Barriers to Lake Activities, Top 5 Answers

COMMUNITY CONVERSATIONS

Supplementing surveys and gaining more perspective through Onondaga Lake stakeholder interviews

The 2016-17 survey supports previous findings that the people of Onondaga County are largely in agreement that public ownership of Onondaga Lake and most of its shoreline is one of its great assets. There's also overwhelming agreement that it's important to continue the lake cleanup and maintain the progress gained in improving water quality. Continuing the momentum of remediation and retaining public control and protection of a lake that will be increasingly attractive to more people and commercial interests will require effort.

To supplement the survey and gain insight into the current state of the lake, its prospects for the future, and the wishes of the broader community around the lake, FOCUS conducted more than 50 interviews with people involved with the lake. Interviewees included professionals and volunteers engaged in lake conservation work, scientists, engineers, officials involved with lake issues, boaters, anglers, educators, and concerned citizens with long histories related to the lake. Additionally, representatives of the Onondaga Nation provided input through correspondence.



THE OPPORTUNITIES: WHAT'S AHEAD

Increase in visitors: Onondaga Lake Park is the most visited park in the county's system. No doubt that is in part because it is near population centers of Liverpool and Syracuse and is the site of frequent events all year-round. The Visitors Center on the west side of the lake has served as a meeting venue for lake conservation groups and a viewing and display site for birders and bird photography exhibits. It has been host for more than 15,000 visits since 2012. The Onondaga County Parks Department puts the number of visitors to the park in the 100s of thousands.

Chargers Rowing Club: The rowing club has a new boathouse with added storage space for boats. In addition to housing four high school rowing teams, the Chargers Club offers adult learn to row programs, corporate team training, an adaptive rowing program for veterans and houses an indigenous rowing program as well.

Increase in boat traffic: Additional boat launch areas on the west side of the lake and a new boathouse for rowers at the outlet will inevitably result in more boat traffic. Growing interest in small craft including kayaks and paddleboards is demonstrated by the more than 1,000 rentals made at the rental shop at Willow Bay in Onondaga Lake Park. Kayakers are present in open water on the lake in all seasons. Officials at the Onondaga Yacht Club note that there has been a continuing waiting list for boat slips at the marina in the park. At the Inner Harbor a neighborhood and schools initiative has funding to teach high school students how to build rowboats and sailboats.

World Canals conference: The World Canals Conference for 2017 was held in Syracuse September 24 to 28. It was hosted by the New York State Canal Corp, Erie Canalway National Heritage Corridor and Visit Syracuse. This is the 30th annual conference and the first in the United States since the 2010 conference in Rochester. It was expected to draw about 500 canallers and engineers from across the state and around the world, said Bob Radliff, Executive Director of the Erie Canalway National Heritage Corridor. The conference includes canal boat trips to and from the conference as well as day trips during the conference.

NRDA report: Trustees charged with gauging damage to the lake under state law and the federal CERCLA and the Clean Water Act released a draft Natural Resources Damage Assessment Restoration Plan April 24, 2017. (1) Previous reports compiled by the Trustees on the U.S. Fish and Wildlife Service website included a list from 2013 of potential restoration and development projects suggested by a wide variety of community and research organizations. These ranged from extensive wetlands reconstruction efforts and restoring a meandering path to the tributary Onondaga Creek to reforestation and planting efforts already undertaken by some conservation groups. The current plan includes wetlands restoration, a floating pier and wave attenuation device, jetties made safe and accessible and a system of trails near the lake and trails and land reserves in the watershed.

Possible water taxi: Several of the stakeholders interviewed for this report indicated an interest in development of a water taxi service connecting popular points on the lake such as Lakeview Point and Amphitheater, the Inner Harbor and Liverpool and Onondaga Lake Park. They suggested a seasonal ferry could be run through the summer by college students.

More dinner cruises: Mid-Lakes Navigation has provided occasional dinner cruises on the lake from the Seneca River. Many respondents to the survey and those interviewed mentioned that they had participated in dinner cruises and would like to see them be more available on the lake. The Erie Canal Museum each year arranges a dinner cruise as a fundraiser.

Fishing competition: Onondaga Lake has been the site of several fishing tournaments in recent years including bass and carp competitions. The competitions have migrated to nearby Oneida Lake, where in 2017 harmful algal blooms forced the closing of beaches. The contamination that requires fish consumption restrictions on Onondaga Lake catch is a likely deterrent. Still some catch-and-release competitions have expressed interest in the lake, where fish populations have rebounded.

Eagle and bird watching: Among activities commonly cited in the survey and by those interviewed is observing water birds, bald eagles and other wildlife on the lake. The renewed population of bald eagles in New York State is remarkable. Syracuse is unusual in that it is an urban area where the eagles can be fairly reliably seen from within city limits fishing, perching and preening in the wild on and near the lake. National Audubon Society declared the lake an Audubon Important Bird Area in 1998. The lake is a popular stopover for migratory birds and could be an attraction for ecotourism.



Beach: Many people interviewed for this report indicated that they would like to see Onondaga Lake be suitable for swimming. Those most informed about the lake and its water quality acknowledge there are several steps that need to be completed before the lake could be opened for swimming. At this time the water in the northern two thirds of the lake has been consistently deemed suitable for swimming by New York State Health Department standards. In the southern part of the lake, however, the presence of a sewage treatment facility bars swimming in that area regardless of how clean its effluent may be, and periodic overflows make the reason for the restriction clear. Swimming is not to be allowed within 750 feet of such a wastewater outlet, according to NYDEC rules.

The lack of a designated bathing beach area with lifeguards where water quality has been deemed safe rules out swimming from shore at this time. A feasibility study is planned.

Those who have been swimming in the lake have mixed opinions about whether a beach is a wise effort to pursue at this time. While it would certainly improve the perception of the lake as a recreational spot, it would require continued monitoring of water quality.

Several respondents interviewed noted that open water swimming is not as appealing to some as swimming in a pool, and there are many pool swimming options already available particularly to residents of the City of Syracuse. A few respondents recommended looking at the beach attendance figures for other

Onondaga County beaches such as Jamesville Reservoir and Oneida Shores to determine demand for such a feature. Others pointed out that the lake's location near population centers could make it a more popular open-water swimming spot that could attract triathlon competitions.

Some of those most interested in the water quality approve of the plan for a beach as they said it would be a way to assure continued monitoring of water quality and even improvement in the lake's condition.

All of those interviewed who suggested adding a beach to the lake thought it would be best located in the Willow Bay area of Onondaga Lake Park. Additionally, with added connectivity and improved access to a beach, some neighborhoods would have an added recreational activity available without needing a private vehicle.

THE CHALLENGES

What we learned about the lake

Opposing viewpoints: There are still many different viewpoints about the lake's water quality, about what can or should be done to improve it, and about how the lake should be used. The lingering perception that the lake is impossibly contaminated is fading as evidence of its recovery grows and even adamant critics acknowledge that water quality has improved faster than they ever imagined. Many people in our interview process have said that overcoming negative perceptions is one of the greatest challenges for the lake, an observation also borne out in the survey, which found that the primary factor that would prevent them from doing what they would like on the lake – cited by 67.4 percent of respondents – was water quality. The next greatest influence – cited by 42.8 percent of respondents – was beach quality, which is telling because there is no official beach.

The cost benefit point-of-view: After Allied Signal – now Honeywell – ended operations on the western side of the lake the push for cleanup of both private industry and municipal waste began in earnest. The remediation process and legal conflict and negotiations about it have cost hundreds of millions of dollars in both private payments and public tax dollars. So there is a strong feeling that after all that effort and expense the water quality should not be put at risk again. For some that means preventing any use of the lake that could damage water quality or natural habitat. For others it means allowing use of the lake for tour boats, fishing, swimming, and even someday drinking water both to apply extra pressure for health concerns and continued quality improvement and to capitalize on the assets of the lake as a means of recovering costs.

The pristine point-of-view: Onondaga Nation representatives – formerly acting as trustees in the Natural Resources Damage Assessment under CERCLA – have expressed that they would like to see the lake returned to its pre-Columbian quality – simply swimmable, fishable, drinkable. Many in the scientific community recognize that producing drinkable water is possible but don't expect that to be pursued due to adequate existing drinking water infrastructure and the relative cost to tap the lake. Of course, 20 years ago no one predicted the lake's water quality could improve as quickly as it has or that Onondaga Lake would become a regular spot for bald eagles.

Private industry: Honeywell as successor to Allied Signal retains some ownership on the southwest shore as of mid-2017, but the part of the southeast shore owned by CSX railroad is the largest segment of shoreline still in private control. Amtrak passenger trains and CSX freight trains, some carrying oil or chemicals, travel along the shore daily. Transportation interests can conflict with conservation interests and even with competing transportation interests. The CSX railroad bridge has proved a deadly barrier for a tour bus on Onondaga Lake Parkway. Bridges over Onondaga Creek and the Onondaga Lake outlet to the Seneca River limit the size of watercraft that can access the lake.

Governance priorities: While New York State DEC has taken the lead on overseeing cleanup of the lake, many different governing bodies, regulatory agencies, and interest groups have responsibilities for aspects of the lake and its waters. Their responsibilities differ and may at times conflict. Navigation and safety interests for power boaters differ from those of the rowing teams and kayakers. The economic interest in getting more visitors and tourism dollars to a potential beach on the lake run up against the cost

of maintenance and staffing and the interests of the New York State and Onondaga County Departments of Health in monitoring water to assure it remains suitable for swimming. Water at the northern end of the lake has been deemed suitable for swimming for years. At the southern end of the lake contaminated sediment has been removed and capped, but some remains. The Metropolitan Sewage Treatment Plant there has remarkably clean effluent, but state rules barring swimming near a treatment plant and the persistent problem of combined sewer overflows would restrict swimming there. Despite separate priorities in governance immense progress has been made as the parties involved work to improve the lake.

Conflicting recreation interests: As a public asset the lake has many roles for the people of the region, and even those with a shared interest exhibit a multitude of different viewpoints. It could seem that boaters would have shared opinions about the lake, but the interests of those in power boats differ from those in smaller craft. Even the interests of rowers and kayakers have come into conflict over use of limited docks and launch facilities. The custom among boaters is to let courtesy and safety rule, but not every boater recognizes that. Some sailors, rowers, kayakers, and nearby residents have mentioned that they are accustomed to the lake being relatively unused and have concerns about increased activity on the lake and changes ahead.



Lack of a united advocacy group: While other lakes in the state are represented by homeowners associations that advocate over issues related to water quality and safety, Onondaga Lake's shore is not populated by homes or homeowners. Without a Friends of Onondaga Lake group or lakeshore owners association, advocacy is left up to the municipalities surrounding the lake and a variety of interest groups taking up lake-related causes. (See an appended list).

Lack of a single reference point: The Onondaga County Public Library's Central Library, Moon Library at SUNY ESF, New York State Department of Environmental Conservation offices in Syracuse and Albany, Solvay Public Library, Camillus Town Hall and Atlantic States Legal Foundation have been designated as repositories for documents related to cleanup of the lake, according to the NYS DEC. The Onondaga County Office of Environment also has a repository for information on the lake. The extent to which those files are kept current and complete depends upon staffing and many other documents and information resources about the lake exist beyond the cleanup. Some are accessible through the web sites of advocacy and research organizations, (See an appended list) but citizens and visitors to the lake have no clearly recognized reliable and current point of reference to tap for information about the lake.

Changing priorities: The lack of one reference site with dedicated support also means that maintenance of the various reference points and informative web sites is dependent on the changing financial ability and commitment of each organization. Funding should be established to maintain an online and physical repository of information about the lake.

Invasive species: For better and for worse, Onondaga Lake is connected to the world. Boaters can travel by water from Syracuse through the Erie Canal to any point in the world. That also means the lake is open to invasion by non-native species that can have broad impact. Among the early invaders were common carp, native to Asia and introduced in New York State in 1831, according to the DEC. They became pervasive throughout the state decades ago. They are not to be confused with a new invasion of Asian silver and bighead carp that compete with native species in Midwest streams and could eventually reach Onondaga Lake. Mollusks and plants also present invasive threats to the lake's ecosystem. Zebra mussels and quagga mussels have invaded the lake. They have contributed to clearing the lake's waters but also have had an impact on other populations. The Onondaga Lake Conservation Corps has made efforts to remove invasive plant species. The possibility of ecosystem disruption by all these species makes clear the need for boat washing stations and education efforts at launch facilities.



Watershed impact: Many parties interviewed have emphasized that the condition of the lake's water quality is very dependent on the streams flowing into the lake. Developments in municipalities far from the lake but within its 285 square mile watershed can have an impact on the lake. Sediment, contaminants, and changes in water volume are just three of the most obvious. The Tully mud boils sending sediment into Onondaga Creek and the lake, new state laws limiting the kinds of phosphorus lawn fertilizer that can be used, and other rules requiring sediment barriers around construction sites are just examples of factors affecting the lake's water from afar. The Central New York Regional Planning and Development Board is designated to work with municipalities on any projects that will have an impact on the municipal sewage flows into treatment facilities and/or the lake. The impact of a remarkably rainy weather pattern in 2017 also has provided a rare opportunity to see what to expect of the lake in flood conditions.

Increased water traffic: Addition of boat launch sites at the lake, attractions such as the amphitheater, rowing competition and Lake Fest and the World Canals Conference in 2017 was expected to increase the amount of power boat and small watercraft activity. This would be boon to tourism but could put added pressure on monitoring and safety agencies. The third rainiest spring and summer on record dampened activity for much of the 2017 boating season.



EDUCATIONAL PIECES: EXISTING AND RECOMMENDED

The importance of providing up-to-date and accurate information about the state of the lake and its role in the lives of the people of Central New York was emphasized by many of the experts interviewed for this report. Over and over again they stressed the importance of preserving the knowledge gained from the history of the lake's decline and the costly, long and complex process of cleaning it.

The lessons learned from the experience are valuable. They offer hope for restoring other polluted waters around the world and preserving cleaner lakes and rivers, perhaps even making that expertise a marketable product.

"There are only three or four bodies of water in the world that have been studied to this extent," said Ed Michalenko, president of Onondaga Environmental Institute. "Onondaga Lake could be a model, and the information gathered here could be exported around the world to other places in developing countries coping with contamination."

Some who live and work closest to the lake emphasize the value of marketing the renewed quality of the lake and its message of hope. At the same time they and others familiar with the lake think it is too soon to encourage swimming before any safe beach area is developed and before combined sewer overflows stop.

Others point out the need to inform anyone who catches fish from the lake about the government advisories to limit the amount of Onondaga Lake fish they eat because of the risk posed by contaminants including methyl mercury.

That tide has turned. Most people interviewed spoke about the lake as an asset to the community but one in need of continued attention and care.

Marketing videos: Many people interviewed recommended presenting educational material in video form because the lake has visual appeal and short visual presentations are easily absorbed by all generations.

Full-length film: The Onondaga Historical Association has produced a full-length film about the history of the lake "Beneath the Surface: The Storied Past of Onondaga Lake." As of March there had been two sold-out presentations of the movie at a ticket price of \$20 to \$100. The Palace Theater where it was shown seats 700. Since then the community has turned out for several more showings. So there is definitely interest in the lake.

Pamphlets and guide books: Some respondents suggested pamphlets. The cost of printing, reprinting and updating was mentioned as a drawback. However guide books such as the Historic Downtown Syracuse NY Walking Tour book featuring architecture is snapped up by visitors to the city. Director of the Erie Canal Museum Natalie Stetson says having a walking tour guide book for the lake and Inner Harbor areas would be a valuable asset to the visitors to her museum who already have an interest in the waterway and to visiting boaters.

Fish advisory signs: The New York State Department of Health fish advisory for Onondaga Lake says that children and women under 50 should not eat any fish from the lake because of the presence of PCBs, mercury and dioxin and men should limit their consumption. Similar limits apply to nine other bodies of water in the Finger Lakes region, so the need for education is not limited to Onondaga. Onondaga County and the City of Syracuse have installed multilingual fish consumption warning signs at sites around the lake. The Onondaga Lake Watershed Partnership has prepared fish consumption warning signs to be placed at Onondaga Lake. The Onondaga Nation had offered to pay for the signs and the partnership worked with the New York State Department of Health about what the precise words and images on the sign would be and in which languages. There is continued need for outreach particularly to people new to the area who may be unfamiliar with the lake's history of pollution.

Navigation markers: Rowers and sailors on the lake noted that there are areas of the lake that are unexpectedly shallow, where wind can be unusually strong and where there are some underwater hazards that should be marked with buoys.

Sensitive areas: Onondaga Lake Conservation Corps volunteers and Honeywell have been working in recent years to establish plantings of native wetland species to help stabilize the shore. The areas of these plantings and other sensitive areas around the lake may need to be protected if recreational boating increases access to them. One respondent noted that putting up signs that indicate "sensitive wetland" may encourage vandalism as much as protect against it and that it could be wiser to label these shallow soggy areas as being hazardous for boats, which they are.

Curriculum: Several respondents noted that there are some science and ecology programs that conservation and university groups have prepared which have been and are used in schools. One mentioned is the Nature in the City program offered by Baltimore Woods Nature Center. The program for K-6th grade students includes three days of lesson plans and is offered at parks within walking distance of the schools. Appendix G lists some of the many education resources and curricula developed about the lake.



Cultural centers: European visitors find the presence of the Onondaga Nation to be one of the most interesting aspects of Central New York, said David Holder, the former president of Visit Syracuse, the official destination marketing agency of Onondaga County. The role of Onondaga Lake as the site where Hiawatha established the alliance between five nations of the confederacy gives it a sacred place in Haudenosaunee culture. The development of Skā-noñh with its skillful video presentations of the people and their history as well as the environmental history of the lake is a hidden treasure for the area and visitors.

Salt industry: Onondaga County operates the Salt Museum on the shore of the lake which explains the first large scale industry in the area – salt. That museum has been in need of renovation for some time and could be an opportunity for excellence.

Science of the lake: SUNY ESF and Onondaga Community College had been designated to bring together the science of the lake in an education center at the Inner Harbor. The value of the science and engineering expertise gained in this process should not be lost.

Websites galore: The many scientific, engineering and regulatory agencies that have websites with information about the lake can provide a rich resource if there can be some way to bring them together in a site “All about Our Onondaga Lake.”

GOVERNANCE, STEWARDSHIP AND INFORMATION MODELS

One recommendation in the 2012 FOCUS on Onondaga Lake report was to establish a website as an outlet for information about all aspects of the lake. Several of the researchers interviewed for this report described it as one of the most studied lakes in the world. The wealth of information about the freshwater environment gained through the costly cleanup process should not be lost.

Since the 2012 report the number and quality of online resources about the lake has increased, but no single site is available to guide visitors, researchers and others to quick answers through the mass of information and the complexity of governance issues.

Onondaga Lake is unique. However three examples of lakes with complex governance systems, sophisticated online guides and successful image campaigns are worthy of note: Lake Champlain and Lake George in New York and the Yahara Lakes in Dane County, Wisconsin. Each is a magnet for recreation balancing water quality with commercial interests.

Lake Champlain is an example of a lake with governance issues even more complex than those of Onondaga Lake. It covers an area nearly 100 times larger than Onondaga Lake with shores in two states and across an international border and is a transportation corridor for ferries and canal boats. Resources devoted to it are significant and the website of the Lake Champlain Basin Program www.lcbp.org is suitably sophisticated.

Lake George is entirely within New York State and within the borders of the Adirondack Park, but there is also a designated Lake George Park Commission that governs boating and docks on the lake. Lake George has nearly 10 times the surface area of Onondaga Lake. Several web sites provide information about the lake and the Lake George Park Commission site www.lgpc.state.ny.us and the Lake George Association site www.lakegeorgeassociation.org provide what most people would need to know.

The Yahara Lakes of Dane County Wisconsin include four large lakes – three larger and one smaller than Onondaga Lake. Like Onondaga Lake they are in one county and are urban lakes largely within the borders of Madison, a city of about 243,000 people, roughly half the Dane County population. Also like Onondaga Lake they are not a drinking water source and had been the dumping ground for municipal sewage for much of the 20th century. Water quality issues are still a concern. They also are part of a navigation system connected by locks. Dane County maintains a web site www.danewaters.com with information about the lakes and coordinates community engagement efforts around the lakes.

Lake associations: These lakes differ from Onondaga Lake in a key area – private shoreline ownership. Homeowners associations for each provide support and advocacy for the lakes as well as a means for the public to learn about the lakes and provide a forum for their concerns. In the case of the Lake George Association private stewardship dates back to the 1880s, when a fishing group united to address threats to the lake's fishery.

With 90 percent of the shoreline of Onondaga Lake in county control, management of the lake seems as if it could be simpler than on lakes with many owners, but innovation is needed to provide the same level of stewardship for the lake when no individuals have homes along the shore.

Designating an agency or an organization for the stewardship requires care to assure the responsibility is carried on even as funding sources, management priorities and administrations change. Onondaga Lake's legacy is already experiencing challenges caused by a shift from serving as an industrial resource to a recreational resource and will go through more in the future.

Onondaga Lake stewardship: The New York State Department of Environmental Conservation and U.S. Fish and Wildlife Service and formerly the Onondaga Nation had accepted the role of trustees for the Natural Resources Damage Assessment. Onondaga County monitors water quality as its oversight of effluent from the Metro plant. The Onondaga Lake Watershed Partnership and its predecessor the Onondaga Lake Partnership have provided a forum for community members and researchers to advocate for the lake.

Lake information models: The New York State Department of Environmental Conservation has accepted responsibility for retaining much of the information gathered about the lake and the cleanup requirements, but it is distributed among many different pages. The not-for-profit research organization Upstate Freshwater Institute has recorded data about the lake for 30 years and displays daylong data from a buoy at the south end of the lake on its web site www.upstatefreshwater.org, but some parts of the web site are outdated. The Onondaga Lake Watershed Partnership www.olwp.org was created as a forum where interested parties could convene to come to agreement on stewardship of the lake and took over the role that had been played by the Onondaga Lake Partnership. The DEC's redirection of the coordinator for the partnership to the Finger Lakes Watershed Hub has left it operating with a completely volunteer staff and as a result the web site is not current for meetings etc. Onondaga Environmental Institute is a repository for some of the information at www.oei2.org. The transitory nature of online information became obvious a few weeks ago when the OLWP site briefly became inaccessible because the web address needed to be renewed. The need to dedicate continual updating of material is made obvious at each of these web sites.



WORDS OF WISDOM AND NEXT STEPS

Next Steps: First three basics and then some more ...

Keep it clean: The recognized improvement in the water quality of the lake needs to be maintained and continued. Many people interviewed for this report emphasized the role tributaries play in the lake's water quality. They were very aware of Save the Rain and other efforts to reduce combined sewer overflows into the lake. The county is ahead of schedule capturing 97.4 percent of overflows in 2016, exceeding the 95 percent mark not required to be met until 2018. Sentiment remains strong on the need to stop overflows. A few people mentioned the need for residents even far from the lake to be informed about the impact lawn fertilizers have on water quality and the state law that took effect in 2012 that bans lawn fertilizer application from December to April. Sentiment also was strong on the need to stop the odor that rises from the Semet Solvay tar beds on warm days and spoils enjoyment of the lake.

Stewardship: Interest in the lake survey and the many science, engineering and environmental and community groups that have been involved in the lake cleanup over the years demonstrates the importance of the lake. It also has fragmented efforts to support the lake. As recommended in the 2012 report, by several of those interviewed for this report, and successful collaborations elsewhere it's time to renew the process begun with the Onondaga Lake Partnership and Onondaga Lake Watershed Partnership, to designate an official stewardship group that can involve and unite those who care about the lake. The stewardship group could advocate for the lake and advise about or even manage lake activities in the manner of a homeowners association. Models for this can be found in the previous section of this report or here in Onondaga County with Friends of Rosamond Gifford Zoo.

It is essential that the organization structure include provisions to sustain the cost of operations and staff independent of shifting priorities. This could be done by designating that dockage fees on the lake go toward managing the lake.

Visitors guide online and onshore: The stewardship group could consolidate the multitude of information resources about the lake in one online site. That site would be the dominant web presence visitors could turn to for current news about the lake, events, and weather and water conditions, as well as linking to the information about the science and history of the lake. It should include an extensive photo gallery, calendar of events, and travel, weather, boating and fishing advisories. Promoting the website at places where travelers come into town by train, plane, bus, car or boat would be an essential step.

Visioning for the lake: Several participants noted that there is a need for a communitywide visioning session about future of the lake and its surroundings. The question to answer is: It's ours, what will we do with it? Getting on the water has become easier with added boat launches and 25 new docks on the west side of the lake. Getting in the water remains a challenge for anyone without a boat.

Visions for visitors: Several opportunities to provide visitors to the lake with facilities that combine recreation and education have been under consideration and should be pursued.

The simplest and most obvious would involve making the existing Honeywell Visitors Center on the west side of the lake into a permanent public access facility. The Visitors Center has been host for events and more than 15,000 visits since it opened in 2012. It's easily accessible from I-690 and provides a wide view of the lake and Syracuse for birders and other visitors. It has been used as a meeting point for conservation groups and a launch point for boaters.

State University of New York College of Environmental Science and Onondaga Community College had announced plans for a water environment education center featuring the lessons learned on the lake and continuing research there.

The FOCUS on Onondaga Lake 2012 report called for beginning the conversation to build support for a Haudenosaunee cultural center on the north shore of the lake. The Skā-noñh Great Law of Peace Center opened in 2015 featuring the history of the Six Nations of the Haudenosaunee, the development of democracy from Native American traditions and Hiawatha's visit to Onondaga Lake, and the saga of community involvement in the cleanup of the lake. The center's location on the east side of the lake across a busy highway from the shore means it's not yet at the lake, but that could change as the future of Onondaga Lake Parkway and the Salt Museum are considered.



APPENDICES

- a. Survey questions: Page 42
- b. Survey results: www.focussyracuse.org/projects
- c. List of Onondaga Lake reports 2012-2017 (Pre-2012 See 2012 Report)
www.focussyracuse.org/projects
- d. List of Onondaga Lake information resources
 - 1. Online:
 - Honeywell/OLCC: www.lakecleanup.com
 - Onondaga County WEP: ongov.net/wep
 - Onondaga County Parks: onondagacountyparks.com/parks/Onondaga-lake-park
 - NYS DEC: www.dec.ny.gov/lands/72771.html
 - NYS DEC Superfund info: www.dec.ny.gov/chemical/8668.html
 - US Fish & Wildlife Service: www.fws.gov/northeast/nyfo/ec/onondaga.htm
 - Department of the Interior NRD: www.doi.gov/restoration
 - Onondaga Environmental Institute: www.oei2.org
 - Upstate Freshwater Institute: www.upstatefreshwater.org
 - Onondaga Lake Watershed Partnership: www.olwp.org
 - NYS Canal Corp.: www.canals.ny.gov
 - Chargers Rowing Club: www.chargersrowing.org
 - Onondaga Yacht Club: www.oiccny.org
 - Atlantic States Legal Foundation: www.aslf.org, www.onondagalake.org
- e. List of regulatory agencies and contacts: www.focussyracuse.org/projects
- f. List of existing educational material: www.focussyracuse.org/projects
- g. FOCUS Activities with Onondaga Lake 2012-2017 (1998-2012 See 2012 Report, page 41)

FOCUS Lake Activities 2012-2017

2012

Forum on Onondaga County's Save the Rain Program
Forum on Future Plans for Onondaga Lake – Share Your Ideas
Forum on Onondaga Lake Shoreline
Presentation to Planning Federation on Citizens Visions of Onondaga Lake
Report FOCUS on Onondaga Lake: A Roadmap to Facilitate Reconnecting the Lake with the Community

2013

Forum on Building Sustainable Communities: Citizens Shape the Future of Onondaga Lake
Forum on Onondaga Lake Watershed

2014

Forum on Role of Natural Resources Damage Assessment in the Restoration of Onondaga Lake

Forum on Vision for a Bird Friendly Onondaga Lake and Community

2015

Forum on Swimming in Onondaga Lake

2016

Forum on Reconnecting Onondaga Lake with Citizens and the Community
Snapshot Survey at Onondaga Cup and Lake Fest

Convening of Onondaga Lake Resource Advisory Work Group for first of four meetings

Launching of survey: Our Lake Reconnecting Citizens to Onondaga Lake
Forum on Connect the Drops and Onondaga Lake Survey Launch

2017

Conclusion of survey and analysis of results

Forum on Onondaga Lake Natural Resources Damage Assessment Draft Restoration Plan
Second Snapshot Survey at Onondaga Cup and Lake Fest

Follow-up Snapshot Survey at Onondaga Lake Fest 2017.

Survey questions: Page 42–49

OUR LAKE: RECONNECTING CITIZENS TO ONONDAGA LAKE

The following questions will help to identify citizens' visions as we reconnect to Onondaga Lake. Your input is important and will be included in a final report to the community and government officials. The survey will take only 5-10 minutes to complete. Your answers will be confidential and the results will be presented only in aggregate.

Please contact F.O.C.U.S. Greater Syracuse at 315-448-8732 or via email at onondagalakesurvey@gmail.com with any questions regarding the survey. Thank you for being an engaged citizen.

* Required

Current Water Activities on Any Body of Water

For the purposes of this survey, "water activities" are activities which require water for participation.

What do you usually do in or on a lake, river, ocean or other body of water? *

Check all that apply.

- ☐ Nothing
- ☐ Wading or sunning
- ☐ Viewing waterfowl, birds or other wildlife
- ☐ Swimming
- ☐ Diving or snorkeling
- ☐ Fishing, including ice fishing
- ☐ Hunting birds or waterfowl
- ☐ Rowing, paddling or kayaking
- ☐ Sailing
- ☐ Jet-skiing or other personal watercraft use
- ☐ Water skiing or tubing
- ☐ Motorized boating
- ☐ Other: _____

Please check your other outdoor water activities of the past year. *

Check all that apply.

- ☐ None
- ☐ Education or science program
- ☐ Dinner cruise or other entertainment
- ☐ Water transportation such as a water taxi, ferry or pontoon air travel
- ☐ Water sport such as competitive rowing or fishing derby
- ☐ Public event such as a regatta or festival
- ☐ Other: _____

Current Water Activities on Any Body of Water (cont'd)

How many days did you spend in outdoor water activities in the past year? *

Check only one box.

- ☐ None
- ☐ 1 - 5
- ☐ 6 - 12
- ☐ 13 - 24
- ☐ 25 or more

How important are each of the following to your overall water experience? *

Check only one box per row.

	Not Important	Moderately Important	Very Important
Abundance of fish and other wildlife	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Affordable or free	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Beach quality	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Enjoying nature	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Feeling relaxed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Getting physical exercise	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Having fun	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Peace and quiet	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Quality time with family	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Safe environment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Scenic beauty	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Socializing with friends	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Testing my water skills	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Uncrowded environment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Water quality	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Well enforced rules	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Current Water Activities on Onondaga Lake

What do you like best about Onondaga Lake?

Check all that apply.

- ☐ Nothing
- ☐ Natural beauty
- ☐ Clean up efforts
- ☐ Ability to reconnect with a recovering lake
- ☐ Restoration of wildlife, birds, plants and clean water
- ☐ Attracting wildlife, like bald eagles
- ☐ Tourist attraction
- ☐ Historical significance
- ☐ Spiritual and cultural significance
- ☐ Sacred lake for the Onondaga Nation
- ☐ Public accessibility
- ☐ Easy to get to from anywhere in CNY
- ☐ Scientific laboratory
- ☐ Other: _____

Please check the seasons you like to go to Onondaga Lake:

Check all that apply.

- ☐ Winter
- ☐ Spring
- ☐ Summer
- ☐ Fall
- ☐ None of the above

How often do you go into or onto Onondaga Lake? *

Check only one box.

- ☐ Daily or almost daily, in season
- ☐ Weekly, in season
- ☐ Several times a year
- ☐ Once or twice a year
- ☐ Less than once a year
- ☐ Never

Current Water Activities on Onondaga Lake (cont'd)

What did you do in or on Onondaga Lake during the past year? *

Check all that apply.

- ☐ Nothing
- ☐ Wading or sunning
- ☐ Viewing waterfowl, birds or other wildlife
- ☐ Swimming
- ☐ Diving or snorkeling
- ☐ Fishing, including ice fishing
- ☐ Hunting birds or waterfowl
- ☐ Rowing, paddling or kayaking
- ☐ Sailing
- ☐ Jet-skiing or other personal watercraft use
- ☐ Water skiing or tubing
- ☐ Motorized boating
- ☐ Education or science program
- ☐ Dinner cruise or other entertainment
- ☐ Water sport such as competitive rowing or fishing derby
- ☐ Attended a public event such as a regatta or festival
- ☐ Other: _____

Future Water Activities on Onondaga Lake

What would you like to do on or in Onondaga Lake in the future?*

Please choose very desirable, desirable, neutral, undesirable or very undesirable for each activity below.

	Very undesirable	Undesirable	Neutral	Desirable	Very desirable
Viewing waterfowl, birds or other wildlife	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wading or sunning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Swimming	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Diving or snorkeling	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fishing, including ice fishing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rowing, kayaking or paddling	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hunting birds or waterfowl	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sailing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Jet-skiing or other personal watercraft use	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Water skiing or tubing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Motorized boating	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Education or science program	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Water sport	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Water transportation, such as a water taxi, ferry or pontoon air travel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dinner cruise or other entertainment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Attend a public event, such as a regatta or festival	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

What would prevent you from doing what you want to do in or on Onondaga Lake? *

Check all that apply.

- ☐ Noise
- ☐ Access to the water
- ☐ Activity not offered
- ☐ Beach Quality
- ☐ Cost
- ☐ Crowding
- ☐ Lack of equipment for rental or sale
- ☐ Rules
- ☐ Safety
- ☐ Transportation to the lake
- ☐ Water quality
- ☐ Other: _____

Your Experience with Onondaga Lake

Please indicate your level of agreement with the following statements about Onondaga Lake:

Check only one box per "statement" row.

	Agree	Undecided	Disagree
Onondaga Lake is a place I look forward to visiting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Spending recreational time at Onondaga Lake makes me feel good	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Onondaga Lake is a place I go to when I want to feel close to nature	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I feel comfortable being at Onondaga Lake Park	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The park facilities help me connect with Onondaga Lake	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Onondaga Lake is "our" lake, the people's lake	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

About You

Zip code of your primary residence *

How long have you been going to Onondaga Lake? *

- ☐ Never
- ☐ Less than 5 years
- ☐ 6 - 10 years
- ☐ 11 - 20 years
- ☐ More than 20 years

How do you usually get to Onondaga Lake? *

Check only one box.

- ☐ Not applicable, I do not go to the lake
- ☐ By car
- ☐ Public transportation
- ☐ Walking
- ☐ By bike
- ☐ By boat
- ☐ Other : _____

About You (cont'd)

On average, how long does it take you to travel one-way from your home to Onondaga Lake? *

Check only one box.

- ☐ 0 - 5 minutes
- ☐ 6 - 15 minutes
- ☐ 16 minutes to half an hour
- ☐ More than half an hour
- ☐ Not sure

How do you get news about Onondaga Lake?

Check all that apply.

- ☐ Conferences, meetings and other public events
- ☐ Email
- ☐ Government websites such as NYS DEC, EPA
- ☐ Newspapers
- ☐ Online news sites for radio, television or newspapers
- ☐ Onondaga County government web pages
- ☐ Personal conversations
- ☐ Radio
- ☐ Research and academic organizations
- ☐ Social media such as Twitter, Snapchat or Facebook
- ☐ Television
- ☐ Weather broadcasts
- ☐ Other: _____

About You (cont'd)

We are trying to include voices from a broad, cross-section of the community in this survey.
Answering the following questions will help us ensure that this goal is attained.

Gender

- ☐ Prefer not to answer
- ☐ Female
- ☐ Male
- ☐ Other : _____

How would you describe yourself? *

Choose ONE OR MORE answers

- ☐ Prefer not to answer
- ☐ American Indian or Alaska Native
- ☐ Asian
- ☐ Black or African American
- ☐ Hispanic or Latino
- ☐ Immigrant, refugee or new American
- ☐ Multicultural
- ☐ Native Hawaiian or Other Pacific Islander
- ☐ White
- ☐ Other: _____

In what year were you born? *

What is your current annual household income? *

- ☐ Prefer not to answer
- ☐ Less than \$20,000
- ☐ Between \$20,000 and \$49,000
- ☐ Between \$50,000 and \$99,000
- ☐ Between \$100,000 and \$250,000
- ☐ Over \$250,000

If you would like to receive the results of this survey, please provide your email:

Please return your survey results via scanned email attachment to onondagalakesurvey@gmail.com
or to the attention of F.O.C.U.S. Greater Syracuse ~ 201 E. Washington Street ~ Syracuse, NY 13202

THANK YOU!